

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical
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Application Serial Number: 10/521,478A
Source: IFWO
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IFWO

RAW SEQUENCE LISTING

DATE: 08/31/2006

PATENT APPLICATION: US/10/521,478A

TIME: 09:06:41

Input Set : N:\RJAVED\10521478.txt

Output Set: N:\CRF4\08312006\J521478A.raw

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4 <110> APPLICANT: Michel, Albrecht
5      Scheffler, Brian E.
6      Netherland, Michael D.
7      Dayan, Franck E.
8      Arias de Ares, Renee S.
10 <120> TITLE OF INVENTION: HERBICIDE-RESISTANT PLANTS, AND POLYNUCLEOTIDES AND
11      METHODS FOR PROVIDING SAME
W--> 13 <130> FILE REFERENCE:
C--> 15 <140> CURRENT APPLICATION NUMBER: US/10/521,478A
C--> 16 <141> CURRENT FILING DATE: 2005-01-17
18 <160> NUMBER OF SEQ ID NOS: 8
20 <170> SOFTWARE: PatentIn Ver. 2.1
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 1982
24 <212> TYPE: DNA
25 <213> ORGANISM: Hydrilla verticillata
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28 <221> NAME/KEY: CDS
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37 Leu Gln Asn Arg Tyr Pro Ala Ser Ser Ser Val Ser Cys Phe Leu Gly
38          20          25          30
40 aaa gag tac aga tgc aac agt atg tta gga ttc tgc ggt agt gga aaa 146
41 Lys Glu Tyr Arg Cys Asn Ser Met Leu Gly Phe Cys Gly Ser Gly Lys
42          35          40          45
44 ttg gct ttt ggc gca aat gca ccc tat tct aag att gca gct acc aaa 194
45 Leu Ala Phe Gly Ala Asn Ala Pro Tyr Ser Lys Ile Ala Ala Thr Lys
46          50          55          60
48 cca aag ccc aaa ctt cgc cct ttg aag gtc aac tgc atg gat ttc cca 242
49 Pro Lys Pro Lys Leu Arg Pro Leu Lys Val Asn Cys Met Asp Phe Pro
50          65          70          75
52 aga cct gat ata gat aac act gct aat ttc ttg gaa gct gct gct ctt 290
53 Arg Pro Asp Ile Asp Asn Thr Ala Asn Phe Leu Glu Ala Ala Ala Leu
54 80          85          90          95
56 tct tcc tct ttt cgc aat tca gca aga cca agt aaa cct ctt caa gtt 338
57 Ser Ser Ser Phe Arg Asn Ser Ala Arg Pro Ser Lys Pro Leu Gln Val
58          100          105          110
60 gta att gct ggt gca ggt ttg gct ggt ctt tca aca gca aag tat ctc 386
61 Val Ile Ala Gly Ala Gly Leu Ala Gly Leu Ser Thr Ala Lys Tyr Leu

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Input Set : N:\RJAVED\10521478.txt

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65	Ala Asp Ala Gly His Ile Pro Ile Leu Leu Glu Ala Arg Asp Val Leu							
66		130		135		140		
68	ggg ggc aag gtg gca gcg tgg aaa gat gat gat gga gac tgg tat gag							482
69	Gly Gly Lys Val Ala Ala Trp Lys Asp Asp Asp Gly Asp Trp Tyr Glu							
70		145		150		155		
72	aca ggc ctg cat ata ttt ttt ggt gca tat ccc aat gtg cag aat tta							530
73	Thr Gly Leu His Ile Phe Phe Gly Ala Tyr Pro Asn Val Gln Asn Leu							
74	160		165		170		175	
76	ttt ggt gaa ctt ggc ata aat gat cgt cta caa tgg aaa gag cat tca							578
77	Phe Gly Glu Leu Gly Ile Asn Asp Arg Leu Gln Trp Lys Glu His Ser							
78		180		185		190		
80	atg att ttt gcg atg cca aac aag cca ggg gaa ttt agt cgc ttt gat							626
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84	ttt cca gaa gta ctt cct gct cca cta aat gga ata tgg gca atc ctt							674
85	Phe Pro Glu Val Leu Pro Ala Pro Leu Asn Gly Ile Trp Ala Ile Leu							
86		210		215		220		
88	aaa aac aat gaa atg ctc act tgg cca gag aaa gtg caa ttt gct att							722
89	Lys Asn Asn Glu Met Leu Thr Trp Pro Glu Lys Val Gln Phe Ala Ile							
90		225		230		235		
92	gga cta cta cct gca atg att ggg ggg cag cca tat gtt gaa gct cag							770
93	Gly Leu Leu Pro Ala Met Ile Gly Gly Gln Pro Tyr Val Glu Ala Gln							
94	240		245		250		255	
96	gat ggc tta aca gtt caa gag tgg atg aga aaa cag ggt gtg ccg gat							818
97	Asp Gly Leu Thr Val Gln Glu Trp Met Arg Lys Gln Gly Val Pro Asp							
98		260		265		270		
100	cga gtc aat gac gag gtt ttc att gca atg tca aag gct ctt aac ttc							866
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105	Ile Asn Pro Asp Glu Leu Ser Met Gln Cys Ile Leu Ile Ala Leu Asn							
106		290		295		300		
108	cgt ttc ctt cag gaa aag cat ggg tgc aag atg gcc ttt tta gat ggt							962
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112	aat cca cct gaa aga tta tgt aag cca att gct gat cac atc gag tca							1010
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114	320		325		330		335	
116	ttg ggt ggc caa gtc atc ctt aat tcc cga ata cag aag att gag ctg							1058
117	Leu Gly Gly Gln Val Ile Leu Asn Ser Arg Ile Gln Lys Ile Glu Leu							
118		340		345		350		
120	aat gca gac aaa tcc gtc aag cat ttt gtg ctc acc aat gga aat ata							1106
121	Asn Ala Asp Lys Ser Val Lys His Phe Val Leu Thr Asn Gly Asn Ile							
122		355		360		365		
124	ata aca gga gat gca tat gta ttt gca aca cct gtt gat atc ttg aag							1154
125	Ile Thr Gly Asp Ala Tyr Val Phe Ala Thr Pro Val Asp Ile Leu Lys							
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136 agg aag ttg aag aac aca tac gat cat ctt ctt ttc agc agg agt cca 1298
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138      420      425      430
140 ctg ttg agc gtt tat gca gac atg tct gtt aca tgc aag gaa tac tac 1346
141 Leu Leu Ser Val Tyr Ala Asp Met Ser Val Thr Cys Lys Glu Tyr Tyr
142      435      440      445
144 aat cca aat caa tcc atg ctt gag cta gta ttt gca cca gca gag aaa 1394
145 Asn Pro Asn Gln Ser Met Leu Glu Leu Val Phe Ala Pro Ala Glu Lys
146      450      455      460
148 tgg attt tca tgc agt gac agt gaa atc att aac gcg act atg caa gag 1442
149 Trp Ile Ser Cys Ser Asp Ser Glu Ile Ile Asn Ala Thr Met Gln Glu
150      465      470      475
152 ctt gct aaa ctg ttt cca gat gag att tct gct gat caa agc aag gcc 1490
153 Leu Ala Lys Leu Phe Pro Asp Glu Ile Ser Ala Asp Gln Ser Lys Ala
154 480      485      490      495
156 aaa att ttg aaa tat cat gtt gta aag acc ccg agg tca gtt tac aag 1538
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160 acg gtc cct gat tgt gaa cca tgc cgg cct ttg caa aga tct cca att 1586
161 Thr Val Pro Asp Cys Glu Pro Cys Arg Pro Leu Gln Arg Ser Pro Ile
162      515      520      525
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165 Glu Gly Phe Tyr Leu Ala Gly Asp Tyr Thr Lys Gln Lys Tyr Leu Ala
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168 tca atg gaa ggt gcc gtg tta tct ggg aag cta tgt gct cag gca att 1682
169 Ser Met Glu Gly Ala Val Leu Ser Gly Lys Leu Cys Ala Gln Ala Ile
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172 gtg cag gac tgc agc ttg ttg gct tct agg gta cag aaa agc cca cag 1730
173 Val Gln Asp Cys Ser Leu Leu Ala Ser Arg Val Gln Lys Ser Pro Gln
174 560      565      570      575
176 acg ttg acg att gcc tga ttcaggaaac ttttatgcag gttcagtttg 1778
177 Thr Leu Thr Ile Ala
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182 tatagtaaaa actccacact ctttctcatg tatagctaca tcagcaagca aagggggtaa 1898
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201	Ala	Phe	Gly	Ala	Asn	Ala	Pro	Tyr	Ser	Lys	Ile	Ala	Ala	Thr	Lys	Pro	
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228				260					265					270			
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232		290					295						300				
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234	305					310					315					320	
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250           435           440           445
251 Pro Asn Gln Ser Met Leu Glu Leu Val Phe Ala Pro Ala Glu Lys Trp
252           450           455           460
253 Ile Ser Cys Ser Asp Ser Glu Ile Ile Asn Ala Thr Met Gln Glu Leu
254 465           470           475           480
255 Ala Lys Leu Phe Pro Asp Glu Ile Ser Ala Asp Gln Ser Lys Ala Lys
256           485           490           495
257 Ile Leu Lys Tyr His Val Val Lys Thr Pro Arg Ser Val Tyr Lys Thr
258           500           505           510
259 Val Pro Asp Cys Glu Pro Cys Arg Pro Leu Gln Arg Ser Pro Ile Glu
260           515           520           525
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262           530           535           540
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288 tattaacact cctctctttt gttcaggctt tatttcccca atg gcc gct tgt ggc 235
289                               Met Ala Ala Cys Gly
290                               1           5
292 tat ata tct gct gcc aac ttc aat tat ctc gtt ggc gcc aga aac ata 283
293 Tyr Ile Ser Ala Ala Asn Phe Asn Tyr Leu Val Gly Ala Arg Asn Ile
294           10           15           20
296 tcc aaa ttc gct tct tca gac gcc aca att tcg ttt tca ttt ggc ggg 331
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301 Ser Asp Ser Met Gly Leu Thr Leu Arg Pro Ala Pro Ile Arg Ala Pro
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VERIFICATION SUMMARY

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L:15 M:270 C: Current Application Number differs, Replaced Application Number

L:16 M:271 C: Current Filing Date differs, Replaced Current Filing Date